

REMARKS

The Office Action dated September 19, 2007, has been received and reviewed. Claims 1, 12, 26, and 33 have been amended. The pending claims are claims 1, 3-12, 14-26, 28-34, and 36-39. Reconsideration and withdrawal of the rejections are respectfully requested.

Claim Amendments

Claims 1, 12, 26, and 33 have been amended to recite that the continuous intermediate layer includes a multiple-layer polymer optical film reflector. Support for these amendments can be found, e.g., in the Specification at page 9, lines 25-28.

No new matter was added.

The 35 U.S.C. § 103(a) Rejections

Claims 12, 14-17, 25-26, and 31-32 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Durocher et al. (U.S. Patent No. 6,733,711).

Applicants traverse this rejection; however, to further move this application towards allowance, Applicants have amended independent claims 12 and 26. Applicants submit that amended independent claims 12 and 26 are not *prima facie* obvious in view of Durocher et al. because such reference does not teach all of the elements of claims 12 and 26. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references must teach or suggest all the claim limitations. *See* M.P.E.P. § 2143.

Amended claim 12 in part recites a light source that includes a continuous intermediate layer disposed between an array of LED dies and couplers. The continuous intermediate layer includes a multiple-layer polymer optical film reflector and is substantially transparent to the LED light.

Amended claim 26 in part recites a light source that includes a continuous intermediate layer disposed over an array of LED dies. The continuous intermediate layer includes a multiple-layer polymer optical film reflector and is substantially transparent to the LED light.

In contrast to claims 12 and 26, Durocher et al. does not teach a continuous intermediate layer that includes a multiple-layer polymer optical film reflector. As admitted by the Office Action, Durocher et al. does not teach a continuous intermediate layer. Further, Durocher et al. discloses that the alleged intermediate layer 65 is an encapsulant. See Durocher et al. column 8, lines 30-32. Durocher et al. does not teach or suggest that encapsulant material 65 can be a multiple-layer polymer optical film reflector as recited in claims 12 and 26 of the present application. Because Durocher et al. fails to teach all of the elements of claims 12 and 26, such claims are patentable over Durocher et al.

Claims 14-17, 25, and 31-32, which depend from one of independent claims 12 and 26, are patentable over Durocher et al. for the same reasons presented above for claims 12 and 26. In addition, claims 14-17, 25, and 31-32 each recite additional elements that further support patentability when combined with either claim 12 or claim 26.

For at least the above reasons, Applicants submit that claims 12, 14-17, 25-26, and 31-32 are patentable over Durocher et al. Reconsideration and withdrawal of this rejection are, therefore, respectfully requested.

Claims 1, 3-9, 11, 18-23, and 28-30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Durocher et al. in view of Miller et al. (U.S. Patent No. 6,155,699).

Applicants traverse this rejection; however, to further move this application towards allowance, Applicants have amended independent claims 1, 12, and 26 as described above. Applicants submit that independent claims 1, 12, and 26, and claims 3-9, 11, 18-23, and 28-30, which depend from one of these independent claims, are not *prima facie* obvious because the combination of Durocher et al. and Miller et al. does not teach or suggest all of the elements of such claims.

For example, amended claim 1 in part recites a light source that includes a continuous intermediate layer disposed between an array of LED dies and phosphor patches. The continuous intermediate layer includes a multiple-layer polymer optical film reflector.

Amended claim 12 in part recites a light source that includes a continuous intermediate layer disposed between an array of LED dies and couplers. The continuous intermediate layer

includes a multiple-layer polymer optical film reflector and is substantially transparent to the LED light.

Amended claim 26 in part recites a light source that includes a continuous intermediate layer disposed over an array of LED dies. The continuous intermediate layer includes a multiple-layer polymer optical film reflector and is substantially transparent to the LED light.

In contrast to claims 1, 12, and 26, Durocher et al., as mentioned above, does not teach or suggest a continuous intermediate layer that includes a multiple-layer polymer optical film reflector. The addition of Miller et al. does nothing to cure the deficiencies already present in Durocher et al. The portions of Miller et al. relied upon by the Office Action describe a distributed Bragg reflector (DBR) mirror 30 (i.e., the alleged continuous intermediate layer). Miller et al. does not teach or suggest that the DBR mirror is a multiple-layer polymer optical film reflector as is recited, e.g., in claims 1, 12, and 26 of the present application. Because the combination of cited references does not teach or suggest all of the elements of claims 1, 12, and 26, such claims are patentable over the combination of references.

Claims 3-9, 18-23, and 28-30, which depend from one of independent claims 1, 12, and 26, are patentable over the combination of Durocher et al. and Miller et al. for the same reasons as presented above for claims 1, 12, and 26. In addition, claims 3-9, 18-23, and 28-30 each recite additional elements that further support patentability when combined with either claim 1, 12, or 26.

For at least the above reasons, Applicants submit that claims 1, 3-9, 18-23, and 28-30 are patentable over the cited references. Reconsideration and withdrawal of this rejection are, therefore, respectfully requested.

Claim 24 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Durocher et al. as applied to claim 12, in view of Ota et al. (U.S. Patent No. 6,943,380). Applicants traverse this rejection and submit that claim 24 is not *prima facie* obvious because the combination of cited references does not teach or suggest all of the elements of claim 24.

Claim 24 depends from amended claim 12. As described above regarding the 35 U.S.C. § 103(a) rejections of claim 12, Durocher et al. does not teach or suggest all of the elements of claim 12. The addition of Ota et al. does nothing to cure the deficiencies already present in

Durocher et al. Further, claim 24 recites additional elements that further support patentability when combined with claim 12.

For at least the above reasons, Applicants submit that claim 24 is patentable over the cited references. Reconsideration and withdrawal of this rejection are, therefore, respectfully requested.

Claim 10 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Durocher et al. and Miller et al. as applied to claim 1, and further in view of Ota et al. Applicants traverse this rejection and submit that claim 10 is not *prima facie* obvious because the combination of cited references does not teach or suggest all of the elements of claim 10.

Claim 10 depends from amended claim 1. As described above regarding the 35 U.S.C. § 103(a) rejections of claim 1, the combination of Durocher et al. and Miller et al. does not teach or suggest all of the elements of claim 1. The addition of Ota et al. does nothing to cure the deficiencies already present in Durocher et al. and Miller et al. Further, claim 10 recites additional elements that further support patentability when combined with claim 1.

For at least the above reasons, Applicants submit that claim 10 is patentable over the cited references. Reconsideration and withdrawal of this rejection are, therefore, respectfully requested.

Claims 33-34 and 36-39 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Shimizu et al. (U.S. Patent No. 6,949,772) in view of Miller et al.

Applicants traverse this rejection; however, to further move this case towards allowance, Applicants have amended independent claim 33 as described above. Applicants submit that amended claim 33 and its dependent claims 34 and 36-39 are not *prima facie* obvious in view of the combination of cited references because such combination does not teach or suggest all of the elements of claims 33-34 and 36-39.

For example, amended claim 33 in part recites a method of assembling a light source that includes positioning a continuous intermediate layer and a layer of phosphor over an array of LED dies so that LED light passes through the continuous intermediate layer from the LED dies

to the layer of phosphor, where the continuous intermediate layer includes a multiple-layer polymer optical film reflector.

In contrast to claim 33, Shimizu et al. describes LED illumination sources that include LED bare chips 22 covered with a resin 24 (i.e., the alleged continuous intermediate layer). Shimizu et al. however, does not teach or suggest that the resin 24 is a multiple-layer polymer optical film reflector as recited claim 33.

The addition of Miller et al. does nothing to cure the deficiencies already present in Shimizu et al. As mentioned above, Miller et al. describes a DBR mirror (i.e., the alleged continuous intermediate layer). Miller et al., however, does not teach or suggest that the DBR mirror can include a multiple-layer polymer optical film reflector as recited in claim 33 of the present application. As a result, the combination of Shimizu et al. and Miller et al. fails to teach or suggest all of the elements of claim 33 and, therefore, claim 33 is patentable over such combination of references.

Claims 34 and 36-39, which depend from independent claim 33, are patentable over the cited references for the same reasons as presented above for claim 33. In addition, claims 34 and 36-39 each recite additional elements that further support patentability when combined with claim 33.

For at least the above reasons, Applicants submit that claims 33-34 and 36-39 are patentable over the combination of Shimizu et al. and Miller et al. Reconsideration and withdrawal of this rejection are, therefore, respectfully requested.

Summary

It is respectfully submitted that the pending claims are in condition for allowance. Reconsideration and withdrawal of all rejections are respectfully requested. The Examiner is invited to contact Applicants' Representatives, at the below-listed telephone number, if it is believed that prosecution of this application may be assisted thereby.

Respectfully submitted,

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Date

By: /Jay R. Pralle/

Jay R. Pralle, Reg. No.: 52,131

Telephone No.: 651-733-6750

Office of Intellectual Property Counsel
3M Innovative Properties Company
Facsimile No.: 651-736-3833